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EXAMINER	
SMITH, MARCUS	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/608,053	ROBINSON, MICHAEL J.	
	Examiner	Art Unit	
	MARCUS R. SMITH	2419	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *08 September 2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-19 and 34-46* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-19, and 34-46* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 9/08/09 has been entered.

Response to Amendment

2. The amendment filed on 9/08/09 has been considered but is ineffective to overcome the previous prior art references.

Response to Arguments

3. Applicant's arguments filed 9/08/09 have been fully considered but they are not persuasive. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.,* 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

4. With regard to claim 1, the examiner disagrees with the applicant that Hyams apparently does not disclose automatically determining the operating characteristics of handsets coupled to each handset port, or the particular recitation of how the operating characteristics of the handsets are determined by sending information about the

handset a remote IP server and receiving programming information for operating with the handset. First, Hyams teaches, see column 3, tells how the CAS in the gateway communicated with the call agent (remote sources) to load the CAS engine parameters on the gateway. In figure 2, shows how the CAS engine 135, sending a signal to the management 260 and the management 260 system returning general parameters to the CAS system. Thus the examiner can view the management system as the call agent (remote IP server), which communicates with the gateway to download general parameters (operating characteristics). Also the CAS of the gateway exchanges signals from the non IP port which is connected to PBX (column 2, lines 55-67). Even though Hyams system does not have the non-IP port directly connect to the telephone handsets, the combination of Cannon, Oran, and Hyams clearly teaches how the gateway can be directly connect to the non-IP telephone handsets. Therefore the combination Cannon, Oran, and Hyams, can clearly shows how the gateway can receive signals from the telephone handset/PBX through the Sig Driver, 230 to the CAS engine, and then CAS engine sending a signal to the management system 260 (call agent or remote source), which will turn the general parameters to handle the calls on the PBX/telephone handset. The examiner views the state, event, or an action that users define as the information identifying the telephone handset, since that information must be given to management system in order to download the correct program. Therefore, claims 15, 17, 19, 34, and the dependent claims are also rejected for same reasons set out above with respect to claim 1.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 1-13, 15-18, 34-42 and 44-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cannon (US 6,842,447) in view of Oran (US 6,275,574) and Hyams et al. (US 7,415,029).

with regard to claims 1 and 34, Cannon teaches:

A gateway for using non-IP digital PBX telephone handsets with an IP call controller, comprising:

(a) one or more handset ports (telephone) for coupling to one or more non-IP digital PBX telephone handsets (column 3, lines 15-25);

(b) an IP port for coupling to an IP network device (column 3, lines 20-25); and

(c) a protocol translator (signal gateway, 47) circuit (column 4,lines 36-50) that

(i) translates non-IP digital PBX telephone call control signals (ISUP messages) received at a handset port into IP telephone call control signals (SIP signals) for an IP telephone call controller and delivers them to the IP port (column 5, lines 1-15); and

(ii) translates IP telephone call control signals received at the IP port from an IP telephone call controller into non-IP digital PBX telephone call control

signals and delivers them to the one or more handset ports (column 5, lines 1-15).

Cannon discloses all of the subject matter as described above except for a handset port directly connected IP telephone call controller. Cannon has a PBX between the handset port and IP telephone call controller in the gateway.

However Oran teaches a gateway that has a session application (IP call controller) for switching the gateway to IP signals to non-IP signals and vice versa (column 3, lines 35-40). The gateway has a telephone interface that directly connects the session application to a non IP telephone handset directly or through a PBX (column 3, lines 30-35) in order to efficiently map between VOIP and circuit-switched telephone systems (column 1, lines 49-53).

Therefore it would have been obvious to one having ordinary skill in the art at the time invention was made to handset port directly connected IP telephone call controller as taught by Oran in the system of Cannon in order to efficiently map between VOIP and circuit-switched telephone systems.

Cannon and Oran fails to disclose having the gateway configured to automatically determine the operating characteristics of handsets coupled to handset port, by, for each handset port, receiving a signal corresponding a coupled handset; transmitting information identifying the handset to a remote IP server via the IP port; and receiving, from the server, programming information to cause the gateway to work with the handset. Oran does disclose a gateway storing configuration information, but fails to teach how it is receive or updated.

Hyams teaches a gateway that has a programable Channel Associated Signals (CAS) module to that can support different protocols in order to reduce expensive hardware upgrades (column 2, lines 1-12). Since the gateway has a management module to program the CAS module (column 3, lines 1-20), the gateway can download new programs or define parameters at anytime. Hyams teaches, see column 3, tells how the CAS in the gateway communicated with the call agent (remote sources) to load the CAS engine parameters on the gateway. In figure 2, shows how the CAS engine 135, sending a signal to the management 260 and the management 260 system returning general parameters to the CAS system. Thus the examiner can view the management system as the call agent (remote IP server), which communicates with the gateway to download general parameters (operating characteristics). Also the CAS of the gateway exchanges signals from the non IP port which is connected to PBX (column 2, lines 55-67). Thus, Hyams' gateway is able to automatically determine operating characteristics of CAS protocols that the PBX will use to communicate with gateway.

Even though Hyams teaches the CAS signals are coming a PBX switch into the gateway, Cannon and Oran already discloses a telephone can be directly connect to the gateway's telephone interface. Therefore it would have been obvious to one having ordinary skill in the art at the time invention was made to have a programable CAS module with list of CAS protocols to automatically determine the operating characteristics of the device that is connected to the gateway interface, by exchanging signals from the call agent (remote source) as taught by Hyams in the system of Cannon and Oran in order to reduce expensive hardware upgrades. Since the

telephone in Cannon and Oran can be connected to gateway's interface, the combination of Cannon, Oran, and Hyams could determine the operating characteristics of the telephone, and not just PBX switch.

with regard to claims 15 and 17, Cannon teaches:

A system wherein non-IP digital PBX telephone handsets are coupled to an IP telephone call controller in a public telephone network, comprising:

(a) an IP telephone call controller (proxy server, 42, SIP server) operating a public telephone network according to public IP call control protocols and coupled to the global IP network (column 3, lines 30-35);

(b) a gateway coupled to the global IP network at a location remote from the IP telephone call controller (column 3, lines 20-25);

(c) one or more non-IP digital PBX telephone handsets coupled to the gateway via wires for carrying non-IP digital PBX telephone call control signaling between the handset and the gateway (column 3, lines 15-25);

(d) the gateway having one or more protocol translating circuits that (column 4,lines 36-50):

(v) translate non-IP digital PBX call control signals received from a handset into IP call control signals according to the public IP call control protocols of the call controller (column 5, lines 1-15) and

(vi) translate IP call control signals from the call controller into non-IP digital PBX call control signals for a handset coupled to the gateway (column 5, lines 1-15).

(see claim 1 to explain how the combination Oran and Cannon teaches this claim)

Cannon and Oran fails to disclose send a set of signals to each non-IP digital PBX telephone handset designed to produce a different response from each of a plurality of different proprietary handsets; (ii) process the response or responses that are received to identify the type of each non-IP digital PBX telephone handset; (iii) transmitting information identifying the type of handset to a remote IP server; and (iv) receiving, from the server, programming information to cause one or more protocol translating circuits to work with the handset.

Hyams teaches a gateway that has a programable Channel Associated Signals (CAS) module to that can support different protocols in order to reduce expensive hardware upgrades (column 2, lines 1-12). Since the gateway has a management module to program the CAS module (column 3, lines 1-20), the gateway can download new programs or define parameters at anytime. Thus, Hyams' gateway is able to automatically determine operating characteristics of CAS protocols that the PBX will use to communicate with gateway. The CAS module in figure 3 has a transmitter (TX LSD FSM) and a receiver (RX LSD FSM) to communicate with the PBX which is connected to the gateway's interface (column 3, lines 23-35). The TX LSD FSM sends a set of signals to the PBX for a request to channel state, and tone parameters (column 3, lines 60-67). The RX LSD FSM receives the response about the line state parameters and checks for changes in the line, and then CAS will process the event (column 3, lines 35-41). The CAS can only process the user defined state/event/action based of the given

CAS protocol (column 3, lines 30-35). Since the CAS can now execute the appropriate CAS file, then the CAS has properly identified which CAS protocol that the PBX is using at the time. Hyams teaches, see column 3, tells how the CAS in the gateway communicated with the call agent (remote sources) to load the CAS engine parameters on the gateway. In figure 2, shows how the CAS engine 135, sending a signal to the management 260 and the management 260 system returning general parameters to the CAS system. Thus the examiner can view the management system as the call agent (remote IP server), which communicates with the gateway to download general parameters (operating characteristics). Also the CAS of the gateway exchanges signals from the non IP port which is connected to PBX (column 2, lines 55-67).

Therefore it would have been obvious to one having ordinary skill in the art at the time invention was made to have a gateway send and receive signals to determine the type of a device that is connected to the gateway interface by exchanging signals from the call agent (remote source) as taught by Hyams in the system of Cannon and Oran in order to reduce expensive hardware upgrades. Since the telephone in Cannon and Oran can be connected to gateway's interface, the combination of Cannon, Oran, and Hyams could determine the type of the telephone, and not just PBX switch. Hyams also teaches how different types of PBX vary in timing signals (column 2, lines 1-5); thus each type of PBX will produce different timing signals from each other.

With regard to claims 2 and 35, Cannon teaches: wherein the protocol translator circuit is programmable such that it can be programmed to operate properly with each of

a plurality of protocols for non-IP digital PBX telephone call control signals (column 4, lines 35-50).

With regard to claims 3 and 36, Cannon teaches: wherein the protocol translator circuit is programmable such that it can be programmed to operate properly with each of a plurality of protocols for IP telephone call controllers (column 4, lines 35-50).

With regard to claims 4-5, and 37, Cannon teaches: wherein the protocol translator circuit is programmed by IP download (Options) via the IP port (column 4, lines 1-10).

With regard to claims 6-7, and 38, Cannon teaches: wherein the download is initiated in response to establishment of an IP session between the gateway and an IP service (column 4, lines 1-18).

With regard to claim 8, Cannon teaches (see figure 2): wherein, upon receipt at a handset port of one or more predetermined non-IP digital PBX call control signals, instead of or in addition to translating the signal into an IP telephone call control signal, the protocol translator circuit returns a non-IP digital PBX call control signal to the handset port (column 5, lines 1-15).

With regard to claim 9, Cannon teaches (see figure 2): wherein the one or more non-IP digital PBX handset ports includes a first handset port and a second handset port wherein, upon receipt at the first handset port of one or more predetermined non-IP digital PBX call control signals, instead of or in addition to translating the signal into an IP telephone call control signal, the protocol translator circuit sends a non-IP digital PBX call control signal to the second handset port (column 5, lines 1-15).

With regard to claim 10, Cannon teaches (see figure 2): wherein the call control signals are for establishing a voice conference that includes the first and the second handset ports (column 3, lines 15-35: connecting the telephone, coupled to switch 59, to the telephone, coupled to switch.).

With regard to claims 11 and 41, Cannon teaches: further comprising an address registration circuit that assigns (IAM message) an address for IP communications to each handset port to which a non-IP digital PBX telephone is coupled (column 3, lines 35-50) and registers (REGISTER message) each address for IP communications with the IP telephone call controller (SIP Server: column 4, lines 1-15).

With regard to claim 12, Cannon teaches: further comprising a registration circuit that registers (REGISTER message) the gateway with the IP telephone call controller (SIP Server) for subsequent system management (column 4, lines 1-15).

With regard to claims 13, 16, 18, and 42, Cannon teaches (see figure 1): further comprising: routing non-voice IP data packets between the IP port and one or more IP sub-ports (personal computers, 39: column 3, lines 20-25); while providing quality-of-service preference to voice IP data packets translated to and from handset ports coupled to non-IP digital PBX telephone handsets (column 3, lines 256-33).

With regard to claims 39, Cannon teaches (figure 6): further comprising: receiving at the handset port a third non-IP digital PBX call control signal (column 5, lines 15-42); and returning a fourth non-IP digital PBX call control signal to the handset port without delivering a corresponding IP telephone call control signal to the IP port (column 5, lines 15-42).

With regard to claim 40, Cannon teaches: further comprising: receiving at a first handset port a fifth non-IP digital PBX call control signal (column 5, lines 1-16); and sending a sixth non-IP digital PBX call control signal to a second handset port (column 5, lines 1-16).

With regard to claim 44, Oran teaches: wherein the one or more handset ports, IP port, and protocol translator circuit are disposed in a single housing (see figure 2A, column 3, lines 18-40).

With regard to claim 45, Oran teaches: wherein the one or more handset ports, IP port, and protocol translator circuit are configured to communicate through a fully digital signal path (see figure 3, column 4, lines 5-20).

With regard to claim 46, Hyams teaches (see claim 15 for details).

7. Claims 14, 19, and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cannon, Oran, and Hyams as applied to claims 1/34 above, and further in view of Bailis (WO 00/11818 see IDS 6/27/03)..

With regard to claims 14 and 43:

Cannon, Oran, and Hyams discloses all of the subject matter as described above except for having an external form of a plug-in card for an IP telephone call controller where the IP port has an external form for coupling to contacts in said IP telephone call controller.

Bailis teaches a switch that Internet telephone gateway, 54, with Network server, 62, as a plug-in card on the switch's backplane in order to lower the cost of the parts and management of the system (see page 5 of the detail description).

Therefore it would have been obvious to one having ordinary skill in the art at the time invention was made to have Network server plug card on the switch (gateway) as taught by Bailis in the system of Cannon, Oran, and Hyams in order to lower the cost of the parts and management of the system.

With regard to claim 19, see claims 14-15 for the detailed explanation of the combination of Cannon, Oran, Hyams and Bailis.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MARCUS R. SMITH whose telephone number is (571)270-1096. The examiner can normally be reached on Mon-Thurs: 7:30 am - 5:00 p.m. and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Pankaj Kumar can be reached on 571 272-3011. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MRS 9/17/09
/Pankaj Kumar/
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